

SHOALS TECHNOLOGIES GROUP, LLC,
Plaintiff,
v.
VOLTAGE, LLC AND NINGBO VOLTAGE
SMART PRODUCTION CO.,
Defendant.

Defendants Voltage, LLC ("Voltage") and Ningbo Voltage Smart Production Co. ("Smart Production") ("Defendants"), by and through undersigned counsel, hereby respond to the Complaint filed by Plaintiff Shoals Technologies Group, LLC ("Plaintiff").

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I. NATURE OF ACTION

1. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

II. PARTIES

2. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

3. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

4. Admitted.

5. Admitted that Smart Production is a company organized and existing under the laws of the People's Republic of China. Defendants deny the remaining allegations in this paragraph.

III. JURISDICTION AND VENUE

6. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

7. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

8. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

9. Defendants admit that Voltage conducts business in this District. The remaining allegations contained in this

paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

10. To the extent this paragraph contains purportedly factual allegations, Defendants deny those allegations. The remaining allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

11. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

12. Voltage admits that it is incorporated under the laws of North Carolina. The remaining allegations

contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

13. Smart Production admits that it is an affiliate of Voltage. The remaining allegations contained in this paragraph call for a legal conclusion, no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

14. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

15. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the

extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

IV. FACTUAL BACKGROUND

16. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

17. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

18. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

19. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

20. Defendants admit that the '375 Patent and '376 Patent are in the same patent family. Defendants lack sufficient knowledge or information to admit or deny the

remaining allegations contained in this paragraph and therefore denies those allegations.

21. Defendants admit that Figures 31 and 48 appear in the Asserted Patents. Defendants lack sufficient knowledge or information to admit or deny the remaining allegations contained in this paragraph and therefore denies those allegations.

22. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

23. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore denies those allegations.

A. The Asserted Patents

1. The '375 Patent

24. Defendants admit that the '375 patent issued on June 18, 2024, and that it is entitled "Lead Assembly for Connecting Solar Panel Arrays to Inverter." Defendants admit that Dean Solon is the sole named inventor. Defendants admit that the '375 Patent issued from United States Application No. 18/341,655, filed on June 26, 2023,

and is a continuation of U.S. Patent Application No. 17/301,609, filed Apr. 8, 2021, now U.S. Patent No. 11,689,153, which is a continuation of U.S. Application No. 14/849,458, filed on Sept. 9, 2015, now U.S. Patent No. 10,992,254. The remaining allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

25. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

2. The '376 Patent

26. Defendants admit that the '376 patent issued on June 18, 2024, and that it is entitled "Lead Assembly for Connecting Solar Panel Arrays to Inverter." Defendants admit that the sole named inventor is Dean Solon.

Defendants admit that the '376 Patent issued from United States Application No. 18/523,464, filed on November 29, 2023, and is a continuation of U.S. Patent Application No. 18/341,655, filed on June 26, 2023, now U.S. Patent No. 12,015,375, which is a continuation of U.S. Patent Application No. 17/301,609, filed Apr. 8, 2021, now U.S. Patent No. 11,689,153, which is a continuation of U.S. Application No. 14/849,458, filed on Sept. 9, 2015, now U.S. Patent No. 10,992,254. The remaining allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

27. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

B. The Voltage Defendants' Infringing Activities and Products

28. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

29. Admitted.

30. Defendants admit that the Voltage LYNX Trunk Bus is manufactured by and/or on behalf of Voltage in China, including at its affiliate Smart Production.

31. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

32. The allegations contained in this paragraph are generalized, vague, and ambiguous and therefore cannot be admitted or denied. To the extent a response is required, Defendants lack sufficient knowledge or information to

admit or deny the remaining allegations contained in Paragraph 4 of the Complaint and therefore denies those allegations. The remaining allegations contained in this paragraph call for a legal conclusion, no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

33. Defendants lack sufficient knowledge or information to admit or deny the allegations contained in this paragraph and therefore deny those allegations.

34. Defendants admit that it has referenced Shoals patents in the prosecution of their own patents. The remaining allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

35. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the

extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

36. Defendants lack sufficient knowledge or information to admit or deny the remaining allegations contained in this paragraph and therefore denies those allegations.

V. FIRST CLAIM FOR RELIEF
(Infringement of U.S. Patent No. 12,015,375)

37. This paragraph does not contain factual allegations requiring a response. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

A. Direct Infringement

38. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth

of the allegations contained in this paragraph and therefore denies those allegations.

39. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

B. Indirect, Induced, and Contributory Infringement

40. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

41. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

42. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

C. Willful Infringement

43. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore denies those allegations.

44. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

45. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the

extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

46. Defendants deny that Shoals is entitled to damages. The remaining allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

VI. SECOND CLAIM FOR RELIEF
(Infringement of U.S. Patent No. 12,015,376)

47. This paragraph does not contain factual allegations requiring a response. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

A. Direct Infringement

48. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the

extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

49. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

B. Indirect, Induced, and Contributory Infringement

50. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

51. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth

of the allegations contained in this paragraph and therefore deny those allegations.

52. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

C. Willful Infringement

53. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

54. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

55. The allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

56. Defendants deny that Shoals is entitled to damages. The remaining allegations contained in this paragraph call for a legal conclusion, so no response is required. To the extent a response is required, Defendants lack sufficient knowledge and information to form a belief as to the truth of the allegations contained in this paragraph and therefore deny those allegations.

VII. JURY DEMAND

This paragraph does not contain factual allegations requiring a response.

VIII. PRAYER FOR RELIEF

Defendants deny that Shoals is entitled to any relief in this action, including any of the forms of relief enumerated in this section.

GENERAL DENIAL

All allegations in the Complaint not expressly admitted above are denied.

JURY DEMAND

Defendants request a trial by jury on all issues so triable.

AFFIRMATIVE DEFENSES

Subject to the responses above, Defendants allege and assert the following defenses in response to the allegations in the Complaint, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law, regardless of how such defenses are denominated herein.

Defendants have not yet had the opportunity to take discovery of the information that may be relevant to the matters and issues raised herein. Defendants reserve the right to seek amendment of, modify, and/or expand the defenses disclosed herein and to take further positions as this litigation proceeds.

FIRST DEFENSE
(Invalidity)

1. The asserted claims of the '375 and '376 Patents are each invalid for failure to meet one or more of the requirements set forth in 35 U.S.C. §§ 101, 102, 103, 112, 116 and/or 132.

2. Defendants are in the process of obtaining the relevant prior art. Defendants will set forth further invalidity allegations upon obtaining relevant prior art and in accordance with the time set forth in the procedural schedule.

3. All asserted claims of the '375 and '376 Patents are invalid under § 102 and/or § 103 in view of at least the prior art identified in **Appendix A**, either alone or in combination. The prior art listed therein is exemplary only and should not be construed as limiting the defenses that Defendants will present in any way. Defendants' investigation is ongoing. Defendants reserve the right to rely on additional prior art for the purpose of this defense as such prior art is identified.

4. Depending on the scope of the asserted claims of the '375 and '376 Patents or Plaintiff's contentions in

connection therewith, the asserted claims may be invalid for failure to provide an adequate written description or enabling disclosure or may be indefinite under 35 U.S.C. § 112.

**SECOND DEFENSE
(Non-Infringement)**

5. Defendants have not directly infringed, indirectly infringed, contributed to infringement, or induced infringement of any valid or enforceable claim of the '375 and '376 Patents, either literally or under the doctrine of equivalents, and have not otherwise committed any acts in violation of 35 U.S.C. § 271 under any theory (including directly, contributorily, by inducement, jointly, literally, and/or under the doctrine of equivalents).

6. The asserted claims of the '375 and '376 Patents are not entitled to any construction that would cover any product made, sold, used, offered for sale, or imported into the United States by Defendants. Defendants do not infringe the '375 and '376 Patents, either directly or indirectly, the asserted claims are invalid or unenforceable, and/or Defendants have certain rights arising from various doctrines.

7. Plaintiff has failed to identify its contentions with respect to what articles (and which components and/or software thereof) are accused of infringement and how the involved articles practice each limitation of the asserted claims of the '375 and '376 Patents.

8. By way of example, in Exhibit 3 to the Complaint ("Claim Chart - U.S. Patent No. 12,015,375"), for claim 1, Shoals fails to specifically identify (1) what it contends to be the nexus, (2) what it contends to be the "monolithic mold that encapsulates the nexus," (3) what it contends to be the "feeder pathway," (4) what it means to "extend completely through," (5) what it means to "extend at least partially through," (6) what it means for the drop lines to be "capable of receiving electrical power from a plurality of solar panels," (7) what it means for "combination at the nexus," and (8) what it means for wire to be "exposed." Defendants' omission of a claim limitation should not be construed as an omission that the claim limitation is met.

9. By way of example, in Exhibit 4 to the Complaint ("Claim Chart - U.S. Patent No. 12,015,376"), for claim 1, Shoals fails to specifically identify (1) what it contends

to be the "first drop line" and "first drop line connector," (2) how first or second drop lines "terminate" at first or second drop line connectors, (3) what it means to be "capable of detachable connection to a wire," (4) what it contends to be the "wire harness," (5) what it means "to receive electrical power generated," (6) what it contends to be the "region of electrical interconnection," and (7) what it means to "substantially seal." Defendants' omission of a claim limitation should not be construed as an omission that the claim limitation is met.

**THIRD DEFENSE
(Prosecution History Estoppel)**

13. Plaintiff's claims against Defendants are barred, in whole or in part, by prosecution history estoppel-based admissions and/or statements made (a) to the United States Patent and Trademark Office during prosecution of the '375 and '376 Patents or related patent applications, and/or (b) in the specifications and claims of the '375 and '376 Patents.

FOURTH DEFENSE
(Unclean Hands)

10. Each Asserted Claim of U.S. Patent No. 12,015,375 ("375 Patent") and U.S. Patent No. 12,015,376 ("376 Patent") is unenforceable due to Plaintiff's unclean hands in its prosecution of the Asserted Patents.

11. Defendants incorporate by reference their first and second counterclaims.

12. The misconduct by Plaintiff and Plaintiff's ITC Counsel in prosecuting the Asserted Patents has immediate and necessary relation to the remedy Shoals now seeks in the instant action. Shoals has admitted that it prosecuted the Asserted Patents specifically to enforce against Voltage after it failed to prove a Section 337 violation in the 1365 Investigation. Plaintiff's request for relief in the instant action should be barred due to unclean hands.

FIFTH DEFENSE
(Inequitable Conduct)

13. Each Asserted Claim of U.S. Patent No. 12,015,375 ("375 Patent") and U.S. Patent No. 12,015,376 ("376 Patent") is unenforceable due to Plaintiffs' inequitable conduct during its prosecution of the Asserted Patents.

14. Defendants incorporate by reference their third and fourth counterclaims.

15. Plaintiff's prosecution counsel's deliberate withholding of material information from the 1365 Investigation while prosecuting the Asserted Patents, with the intent to deceive the Patent Office into allowing additional patents for Shoals to quickly assert against Voltage in a second action in this court and a second investigation before the International Trade Commission renders the Asserted Patents unenforceable.

ADDITIONAL DEFENSES

Defendants reserve the right to assert additional affirmative defenses under Rule 8(c) of the Federal Rules of Civil Procedure, and/or North Carolina common law, and any other defenses, at law or in equity, based on discovery and further factual investigation in this case.

COUNTERCLAIMS

Defendants allege and assert the following counterclaims arising out of the transactions or occurrences that are the subject matter of Plaintiff's claims.

Defendants have not yet had the opportunity to take discovery of the information that may be relevant to the matters and issues raised herein. Defendants reserve the right to amend, modify, and/or expand the counterclaims disclosed herein and to take further positions as this litigation proceeds.

I. The Parties

1. Voltage is a limited liability company incorporated under the laws of North Carolina with a principal place of business at 1450 Raleigh Road, Chapel Hill, North Carolina 27517.

2. Ningbo Voltage Smart Production Co. is a company organized and existing under the laws of the People's Republic of China with a principal place of business located at No. 666, Dongsheng Rd., Jiaochuan Jiedao, Zhenhai District, 315221 Ningbo China.

3. Shoals is a limited liability company duly organized and existing under the laws of Tennessee with its principal place of business located at 1400 Shoals Way, Portland, Tennessee 37148.

II. Jurisdiction and Venue

4. This action arises under the U.S. Patent Act, codified at 35 U.S.C. § 1 *et seq.*, and in particular, but not limited to, 35 U.S.C. §§ 271, 281, 283, 284 and 285.

5. This Court has original jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a) because the claims arise under the patent laws of the United States. These counterclaims are compulsory under Fed. R. Civ. P. 13(a) as they arise out of the same set of facts and circumstances that is the subject matter of Shoals' Complaint.

6. This Court has personal jurisdiction over Counterclaim Defendant Shoals as the actions giving rise to these Counterclaims and the effect on Counterclaim Plaintiffs has been within this district.

7. The instant action in which these counterclaims are filed follows litigation that Shoals initiated against Voltage in this court and in the U.S. International Trade Commission.

III. FACTUAL BACKGROUND

8. On May 4, 2023, Shoals filed a complaint in this Court, alleging infringement by Voltage of U.S. Patent No. 10,553,739 ("739 Patent") and U.S. Patent No. 10,992,254 ("254 Patent"). See *Shoals Technologies Group, LLC v. Voltage, LLC et al*, Case No. 1:23-cv-365, D.E. 1 (M.D.N.C. May 4, 2023). Shoals subsequently filed a first amended complaint, asserting an additional claim of infringement by Voltage of U.S. Patent No. 11,689,153 ("153 Patent"). See *Shoals Technologies Group, LLC v. Voltage, LLC et al*, Case No. 1:23-cv-365, D.E. 19 (M.D.N.C. June 28, 2023). That same day, this Court granted Voltage's consent motion to stay M.D.N.C. Action No. 1:23-cv-365 pursuant to 28 U.S.C. § 1659(a). See *Shoals Technologies Group, LLC v. Voltage, LLC et al*, Case No. 1:23-cv-365, D.E. 20 (M.D.N.C. June 28, 2023). That action remains stayed pending final resolution (including all appeals) of the related International Trade Commission investigation.

9. On the same day that it filed its complaint in M.D.N.C. Action No. 1:23-cv-365, Shoals filed a complaint in the U.S. International Trade Commission under Section

337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, alleging infringement by Voltage of the '739 Patent and the '254 Patent. *See In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, EDIS Doc. ID 795598 (U.S.I.T.C. May 4, 2023) ("the 1365 Investigation"). Shoals subsequently filed an amended complaint, asserting an additional claim of infringement by Voltage of the '153 Patent. *See In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, EDIS Doc. ID 800563 (U.S.I.T.C. July 19, 2023).

10. The law firm of Maschoff Brennan, with Mr. Eric Maschoff as counsel of record, filed the complaint underlying the 1365 Investigation, filed the amended complaint, and remained counsel of record through the Commission's Final Determination. *See, e.g., In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, EDIS Doc. ID 795598 (U.S.I.T.C. May 4, 2023); *see In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, EDIS Doc. ID 800563 (U.S.I.T.C. July 19, 2023).

11. For the next 18 months, Shoals would use the 1365 Investigation and threat of an exclusion order to cast a shadow over Voltage's business. Shoals failed.

12. On March 25, 2024, the Commission terminated the '254 patent from the investigation based on Shoals' withdrawal of the complaint as to that patent. See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 19, EDIS Doc. ID 815-78 (Feb. 28, 2024), *unreviewed by Comm'n Notice*, EDIS Doc 816799 (March 26, 2024).

13. On April 19, 2024, the Commission determined not to review the ALJ's grant of summary determination that Shoals has not satisfied the technical prong of the domestic industry requirement for the '739 Patent and, thus, found no violation as to the '739 patent. See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 20, EDIS Doc. ID 815776 (March 6, 2024), *unreviewed by Comm'n Notice*. EDIS Doc. ID 819109 (Apr. 19, 2024). Shoals appealed that decision and then it was voluntarily dismissed at Shoals' request. See *Shoals Technologies Group, LLC v. Int'l Trade Comm'n*, Case

No. 24-1991, D.E. 45 (Fed. Cir. Dec. 18, 2024). The parties have not entered into any agreements relevant to the merits of Shoals' infringement claim against Voltage as to the '739 patent.

14. In its Final Determination, the Commission found no violation by Voltage of the '153 patent and terminated the investigation in its entirety. *See In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, 90 Fed. Reg. 7157 (Jan. 21, 2025). Shoals has appealed that determination. *See Shoals Technologies Group, LLC v. Int'l Trade Comm'n*, Case No. 25-1439 (Fed. Cir.).

15. Shoals asserted three patents against Voltage in the 1365 Investigation but subsequently withdrew the '254 patent. On summary determination, the Commission found no violation of section 337 as to the '739 patent. Shoals appealed that determination and then withdrew that appeal. Following an evidentiary hearing, the Commission issued a Final determination finding no violation of section 337 as to the '153 patent; Shoals has appealed that determination.

16. On January 9, 2025, Shoals filed its Complaint in this Court, alleging infringement by Voltage of U.S. Patent No. 12,015,375 ("375 Patent") and U.S. Patent No. 12,015,376 ("376 Patent") (collectively, the "Asserted Patents"). See *Shoals Technologies Group, LLC v. Voltage, LLC et al*, Case No. 1:25-cv-00026, D.E. 1 (M.D.N.C. Jan. 9, 2025).

17. The next day, Shoals filed a complaint in the U.S. International Trade Commission under Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, alleging infringement by Voltage of the Asserted Patents. See *In re Certain Photovoltaic Trunk Bus Cable Assemblies and Components Thereof*, Inv. No. 337-TA-1438, EDIS Doc. ID 840806 (U.S.I.T.C. Jan. 10, 2025) ("the 1438 Investigation"). The 1438 Investigation is pending. The ALJ has set a target date of May 1, 2026, but no schedule has been set. See *In re Certain Photovoltaic Trunk Bus Cable Assemblies and Components Thereof*, Inv. No. 337-TA-1438, Order No. 4, EDIS Doc. ID 844795 (U.S.I.T.C. Mar. 3, 2025).

18. In the nine months between adding the '153 Patent to the 1365 Investigation and the evidentiary hearing, the same law firm—Maschoff Brennan—filed the continuation applications that would mature into the Asserted Patents. App. No. 18/341,655 ("'655 Application") would issue on June 18, 2024, as the '375 patent and App. No. 18/523,464 ("'464 Application") would issue on the same date as the '376 Patent. The '375 and '376 Patents are now asserted against Voltage in the instant action.

19. Both Asserted Patents share a common patent specification and are continuations from the original patent application 10/849,458 ("'458 Application") which issued on April 17, 2021, as U.S. Patent No. 10,992,254 ("'254 Patent"). Days before the '254 Patent issued, Eric Maschoff of the law firm Maschoff Brennan, filed continuation application 17/301,609 ("'609 Application") which later issued as U.S. Patent No. 11,689,153 ("'153 Patent"). Shoals asserted the '254 and '153 Patents against Voltage in the 1365 Investigation and in Case No. 1:23-cv-365 in this court.

20. Shoals' complaints in the instant action and in the 1438 Investigation accuse both Voltage's LYNX Trunk Bus and the confidential "Alternative Design" ("AD") LYNX trunk bus of infringing the Asserted Patents. Shoals has publicly claimed that it "believes [these new patents] provide protection against both existing designs as well as any alternative designs that Voltage may create seeking to bypass original '153 Patent."¹

21. Shoals' public statement is a tacit admission that Shoals prosecuted the Asserted Patents with unclean hands to file a second district court action and second ITC investigation against the same Voltage products it failed to prove a Section 337 violation against in the 1365 Investigation. Shoals did so by failing to create or by breaching an ethical wall it agreed to in the 1365 Investigation.

¹ Shoals Technologies Group, *Shoals Technologies Group Appeals ITC Reversal Decision to Federal Circuit and Receives Institution in New ITC Action Against Voltage*, available at <https://investors.shoals.com/news/news-details/2025/Shoals-Technologies-Group-Appeals-ITC-Reversal-Decision-to-Federal-Circuit-and-Receives-Institution-in-New-ITC-Action-Against-Voltage/default.aspx> (last visited Mar. 4, 2025).

22. Voltage's confidential information was produced in the 1365 Investigation subject to a Protective Order ("PO"), which prohibited disclosure of any confidential business information ("CBI") to any person other than those permitted under the PO and bound those persons to use CBI solely for the purposes of the 1365 Investigation. See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 1 at ¶¶ 3-4, EDIS Doc ID 798048 (June 7, 2023).

23. Confidential information Voltage produced about its accused products included: (i) product drawings; (ii) mold drawings; (iii) manufacturing process documents; (iv) bills of materials; (v) mid-production and complete product samples for Voltage's LYNX and AD LYNX; and, (vi) confidential interrogatory responses explaining other possible alternative designs to LYNX that Voltage contended would also not infringe the '254 Patent or the '153 Patent asserted in the 1365 Investigation.

24. On September 21, 2023, Shoals and Voltage filed a stipulation entitled "Stipulation Between Complainant and Voltage Respondents Regarding Prosecution Bar" in the 1365

Investigation ("Prosecution Bar Stipulation"). See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, EDIS Doc. ID 804593 (Sept. 21, 2023). Therein, Shoals agreed that Maschoff Brennan, Shoals' counsel of record in the 1365 Investigation ("ITC Counsel"), would "institute an ethical wall prohibiting the involvement of all attorneys who have access to Voltage's confidential information disclosed in [the 1365 Investigation] from the prosecution of the continuation application, 18/341,655, and any subsequent related applications." Prosecution Bar Stipulation, ¶ 4.

25. Thereafter, Maschoff Brennan either failed to enact an ethical wall as required by the Prosecution Bar Stipulation or enacted such a wall and transferred responsibilities for the prosecution of the Asserted Patents to another Maschoff Brennan partner, Paul Johnson ("New Prosecution Counsel"), who had not subscribed to the protective order in the 1365 Investigation.

26. Rather than abide by the ethical wall, Shoals' ITC Counsel continued to be involved, either directly or

indirectly, with the prosecution of the Asserted Patents, and in violation of the Prosecution Bar Stipulation.

27. ITC Counsel guided the prosecution of the Asserted Patents, through at least (i) direct communications with Mr. Johnson and/or (ii) indirect communications with Mr. Johnson through Shoals' in-house attorneys Mehgan Peetz and/or Rajiv Bhateja, who were involved in overseeing the 1365 Investigation and the prosecution of the Asserted Patents.

28. On September 27, 2023, Voltage served confidential responses to Shoals' interrogatories explaining its contentions that Voltage's LYNX did not infringe the '254 Patent or the '153 Patent and disclosing possible alternative designs to LYNX that Voltage contended would also not infringe.

29. Shoals' ITC Counsel, with Voltage's confidential responses in-mind, participated in one or more of the following: (i) Shoals' decision to amend the originally proposed claims in the '655 Application on November 10, 2023 and prior to the USPTO issuing an office action; (ii) Shoals' decision to file a second continuation application

(the '464 Application) on November 29, 2023 with additional variations of proposed claims and request Track One - Prioritized Examination; (iii) Shoals' decision to supplement its response to an office action in the '655 Application to add five new proposed claims two days after the ALJ issued her *Markman* order on February 20, 2022 in the 1365 Investigation; (iv) Shoals' decision to request internet communication authorization with the Examiner one week later on February 27, 2024; and (v) the exchange of proposals and counterproposals to the claims between the Examiner and Mr. Johnson that occurred within the span of less than nine hours the next day on February 28, 2024.

30. The table below illustrates the prosecution of the Asserted Patents alongside relevant events, including Voltage's disclosure of confidential information of LYNX and AD LYNX, in the 1365 Investigation:

	1365 Investigation	Prosecution of '375 Patent	Prosecution of '376 Patent
June 26, 2023		Mr. Maschoff files '655 Application	
September 20, 2023	<i>(1365 Inv.) Prosecution Bar Stipulation Filed</i>		

	1365 Investigation	Prosecution of '375 Patent	Prosecution of '376 Patent
September 27, 2023		Mr. Johnson files IDS in '655 Application	
September 27, 2023	<i>(1365 Inv.) Voltage discloses confidential non-infringement contentions and alternative designs</i>		
October 12, 2023	<i>(1365 Inv.) Voltage produces confidential product samples of AD LYNX disclosing confidential internal mold structure(s)</i>		
November 10, 2023		Mr. Johnson amends mold limitations in claims in '655 Application	
November 20, 2023	<i>(1365 Inv.) Voltage produces additional confidential product samples of AD LYNX disclosing confidential internal mold structure(s)</i>		
November 29, 2023			Mr. Johnson files '464 Application with new mold limitations
January 12, 2024		PTO issues Non-Final Rejection	
January 29, 2024			PTO issues Non-Final Rejection

	1365 Investigation	Prosecution of '375 Patent	Prosecution of '376 Patent
February 14, 2024		Mr. Johnson amends proposed claims in response to Office Action	
February 16, 2024			Mr. Johnson amends proposed claims in response to Office Action
<i>February 20, 2024</i>	<i>(1365 Inv.) Markman Order</i>		
February 22, 2024		Mr. Johnson supplements response to add five new claims	
February 27, 2024		Mr. Johnson requests authorization for internet communication	
February 28, 2024 (@10:19 am)		Examiner proposes amendments that would bring each case into condition for allowance	
February 28, 2024 (@6:37 pm)		Mr. Johnson sends Examiner counterproposals	

	1365 Investigation	Prosecution of '375 Patent	Prosecution of '376 Patent
February 29, 2024		Examiner-Initiated Interview Summary of February 28, 2024 telephonic interview with Mr. Johnson: "Examiner Cannon proposed amendments (attached as an appendix) to bring the case into condition for allowance. Mr. Johnson proposed alternative amendments, which are incorporated into the instant office action."	
March 6, 2024		Examiner issues Notices of Allowance	

31. Mr. Johnson prosecuted the Asserted Patents with guidance from Shoals' ITC Counsel, in violation of any ethical wall instituted by Maschoff Brennan, the Prosecution Bar Stipulation, and the 1365 Investigation's protective order.

32. Mr. Johnson amended the proposed claims on multiple occasions with input, either directly or indirectly from Shoals' ITC Counsel, who was guided by Shoals' ITC Counsel's knowledge of Voltage's confidential disclosures regarding its LYNX and AD LYNX.

33. By way of example, on November 10, 2023, Mr. Johnson amended the proposed claims in the '655 Application by changing the claim term "undermold" (used in the '254 and '153 patent claims) to just "mold." Mr. Johnson's amendment was not made in response to any communication from the Examiner shown in the prosecution history. As of November 10, 2023, the Examiner had not yet even issued an Office Action. Rather, Mr. Johnson's unprompted decision to amend the claims was guided by Shoals' ITC Counsel after Voltage disclosed its confidential non-infringement contentions and confidential interrogatory responses disclosing alternative designs less than six weeks earlier. Mr. Johnson's proposed amendment to claim 1 is re-produced below:

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. **(Currently Amended)** A lead assembly for electrically coupling one or more drop lines to a feeder cable, the lead assembly comprising:
 - a joint where a section of the feeder cable and a section of the at least one or more drop lines can be electrically coupled at a nexus; and
 - ~~an undermold~~ a mold that encapsulates the nexus, the ~~undermold~~ further comprising:
 - a feeder pathway extending completely through the ~~undermold~~ and configured to allow the feeder cable to extend completely through the ~~undermold~~; and
 - one or more drop line pathways that each extend partially through the ~~undermold~~, and each configured to allow one of the one or more drop lines to extend partially through the ~~undermold~~; [[and]]
 - ~~an overmold encapsulating the undermold;~~
- wherein each of the one or more drop lines are configured to be capable of receiving electrical power from a plurality of solar panels for combination at the nexus to the feeder cable.

34. By way of further example, on November 29, 2023, Mr. Johnson filed a second continuation application, the '464 Application, proposing new claims with broader claim language for the "mold" limitations. For example, proposed claim 1 comprised "one or more mold structures", deviating from the "undermold" / "overmold" and "primary mold" / "secondary mold" terms used in the claims asserted in the 1365 Investigation. Again, Mr. Johnson's new application was not made in response to any communication from the Examiner shown in the prosecution history of the '655 Application. Rather, Mr. Johnson's unprompted decision to seek new claims was again

guided by Shoals' ITC Counsel and with Voltage's confidential disclosures in mind.

35. By way of further example, on February 20, 2024, the Administrative Law Judge issued her *Markman* Order in the 1365 Investigation ("1365 Markman Order"). See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 16, EDIS Doc. ID 795598 (U.S.I.T.C. Feb. 20, 2024). Two days later on February 22, 2024, Mr. Johnson filed a supplemental response to the Examiner's Office Action in the '655 Application, superseding a response Mr. Johnson had just filed eight days prior on February 14, 2024 to add five new proposed claims. Mr. Johnson's decision to pursue additional claims was guided by Shoals' ITC Counsel with Voltage's confidential information in-mind and in direct response to the 1365 Markman Order.

36. Five days later, on February 27, 2024, Mr. Johnson filed an "Authorization for Internet Communications in a Patent Application" at 6:45 PM in the '655 Application and 6:47 PM in the '464 Application.

37. The next morning, the Examiner e-mailed Mr. Johnson at 10:19 AM with proposals for amendments to the

claims in the '464 and '655 Applications that the Examiner indicated would bring the cases into conditions for allowance. The Examiner noted that "Figures 8 and 54 best represent the limitation [the Examiner] is attempting to capture."

38. The Examiner's e-mail and Figures 8 and 54 are reproduced below:

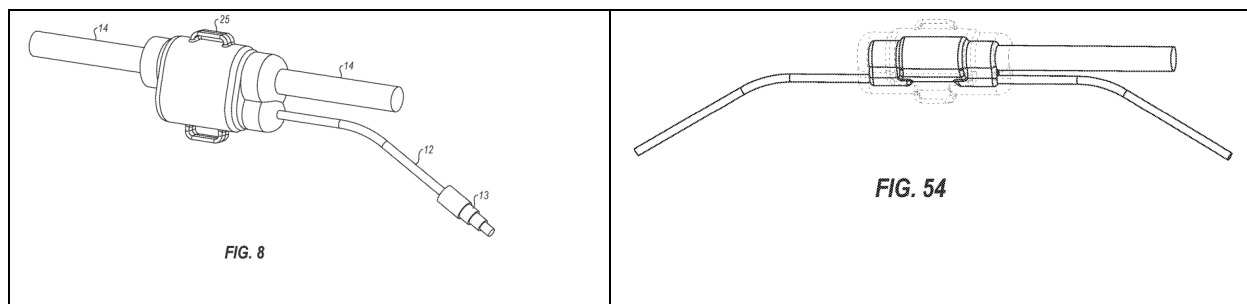
From: Cannon, Ryan <Ryan.Cannon@USPTO.GOV>
Sent: Wednesday, February 28, 2024 10:19 AM
To: Paul Johnson <PJohnson@mabr.com>
Subject: Proposed amendments for 18/523,464 and 18/341,655

CAUTION: External Sender

Mr. Johnson,

Please see the attached pdf for my proposals for examiner's amendment to bring the case into condition for allowance. Instant Figures 8 and 54 best represent the limitations I am attempting to capture. I will take suggestions of alternative language that represents those characteristics. This email exchange and the proposed amendments will be placed into the record of each application. Please let me know by the end of this week if you will need more time to get approval or refusal by your client.

Ryan Smith Cannon, Ph. D.
Primary Examiner, AU 1726
(571) 270-7186



39. The Examiner proposed amendments to each independent claim requiring that the drop line and feeder cable, or their pathways, extend parallel to one another away from the nexus or region of electrical connection (annotated with green highlight below), and for claims having a first and second drop line, that the drop lines, or their pathways, extend in opposite directions, as shown below (annotated with yellow highlight below):

18/341,655 proposed amendments

Claim 1:

After the last line, add –wherein **the one or more drop line pathways and the feeder pathway extend parallel to one another away from the nexus**, and the monolithic mold tapers to distinct apertures through which the one or more drop lines and the feeder cable exit the monolithic mold--.

Claim 17:

After the last line, add –wherein **the first drop line pathway and the second drop line pathway extend in opposite directions** along a longitudinal axis **that is parallel** to a longitudinal axis of the feeder pathway--.

Claim 22:

After the last line, add –wherein **the first drop line pathway and the second drop line pathway extend in opposite directions** along a longitudinal axis **that is parallel** to a longitudinal axis of the feeder pathway--.

18/523,464 proposed amendments

Claim 1:

In line 12, change “disposed about a region” to –disposed about and conforming to a region--.

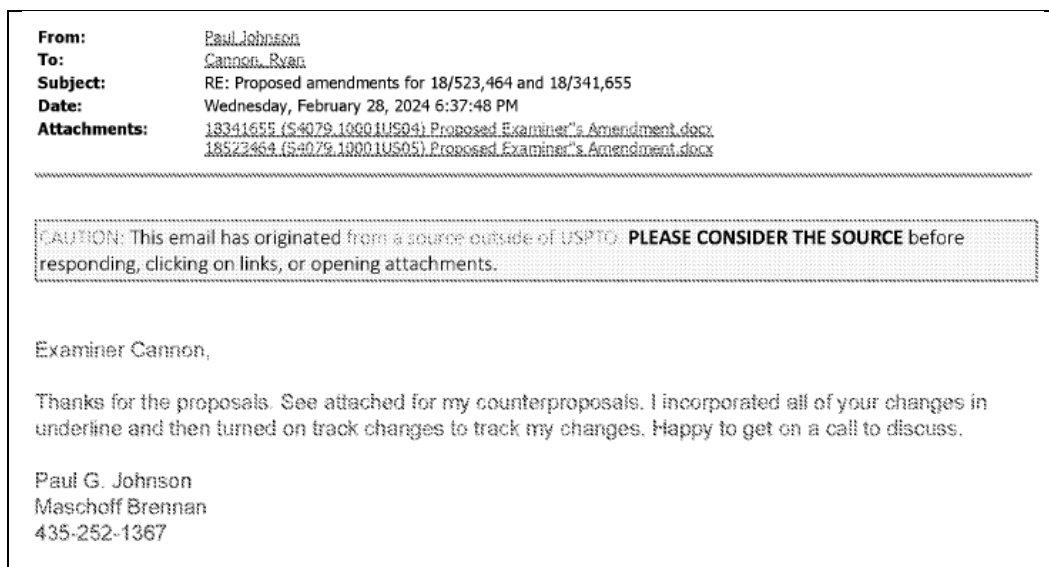
After the last line, add –wherein, in the one or more mold structures, **the first drop line and the second drop line extend in opposite directions** along a longitudinal axis **that is parallel** to a longitudinal axis of the feeder cable--.

Claim 22:

In line 9, change “disposed about a region” to –disposed about and conforming to a region--.

After the last line, add –**wherein the drop line and the feeder cable extend parallel to one another away from the region of electrical interconnection**, and the mold structure tapers to distinct apertures through which the drop line and the feeder cable exit the mold structure--.

40. The same day and less than nine hours later, Mr. Johnson responded to the Examiner's e-mail at 6:37 PM with counterproposals to the Examiner's proposed amendments. Mr. Johnson's e-mail did not provide any explanation for his further amendments. According to an Examiner-Initiated Interview Summary dated February 29, 2024, a telephone conference between Mr. Johnson and the Examiner took place on February 28, 2024, and the Examiner accepted Mr. Johnson's alternative amendments:



Examiner-Initiated Interview Summary	Application No. 18/523,464	Applicant(s) SOLON, Dean		
	Examiner Ryan S Cannon	Art Unit 1726	AIA (First Inventor to File) Status Yes	Page 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	Title	Type
Ryan S Cannon	Primary Examiner	Telephonic
Paul Johnson	Attorney	

Date of Interview: 28 February 2024

Issues Discussed:

Proposed Amendment(s)
Examiner Smith proposed amendments (attached as an appendix) to bring the case into condition for allowance. Mr. Johnson proposed alternative amendments, which are incorporated into the instant office action.

☒ Attachment

41. Through either direct or indirect communications with Shoals' ITC Counsel, Mr. Johnson understood that the Examiner's proposed amendments requiring that the drop line(s) and feeder cable, or their pathways, extend parallel to one another posed challenges for Shoals similar to those that Shoals encountered with its assertion of the '254 Patent in the 1365 Investigation.

42. Shoals moved to terminate the 1365 Investigation with respect to '254 Patent on February 26, 2024 after the 1365 Markman Order construed the claim phrase "second aperture ... parallel to said first aperture", rejecting Shoals' argument that "for purposes of determining the 'parallel' requirement, it is sufficient for any portion of

the 'second aperture' to be parallel to the 'first aperture.'" See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 16, EDIS Doc. ID 814555 at 42-47 (Feb. 20, 2024). The 1365 Markman Order construed the phrase "according to its plain and ordinary meaning, which requires the second aperture, considered as a whole, to be parallel to the first aperture, considered as a whole," noting that "the claim language does not state that 'any portion' or part of the second aperture is parallel to the first aperture." *Id.* at 44-45. Mr. Johnson was aware of the 1365 Markman Order's reasoning and proposed adding "at least a portion of" to the Examiner's proposed amendments for proposed independent claims 17 and 22 in the 655 Application, as shown below (highlighted in green):

wherein at least a portion of the first drop line pathway is parallel to at least a portion of the feeder pathway; and
wherein at least a portion of the first drop line pathway and at least a portion of the second drop line pathway extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder pathway.

wherein at least a portion of the drop line cable pathway is parallel to at least a portion of the feeder pathway; and

wherein at least a portion of the first drop line pathway and at least a portion of the second drop line pathway extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder pathway.

43. Mr. Johnson was aware of the 1365 Markman Order and that Shoals had terminated the 254 Patent from the 1365 Investigation, but intentionally withheld both from the Examiner when Mr. Johnson filed supplemental amendments to add new claims on February 22, 2024 in the '655 Application or in Mr. Johnson's communications with the Examiner on February 28, 2024.

44. Shoals' ITC Counsel guided Mr. Johnson's response to the Examiner, including whether to accept the Examiner's proposed amendments, whether and what counterproposals to make, and what arguments to present to the Examiner such that Mr. Johnson's counterproposals were accepted. Shoals' ITC Counsel's continued involvement in the prosecution of the Asserted Patents violated Maschoff Brennan's ethical wall and the Prosecution Bar Stipulation.

45. Shoals and its ITC Counsel has continued a pattern of violating the Prosecution Bar Stipulation through

continued involvement in the prosecution of related patent applications. On June 10, 2024, prior to the issuance of the '375 and '376 Patents, Mr. Johnson filed another continuation application, 18/739,127 ("127 Application"). Mr. Johnson's drafting of new proposed claims was guided by Shoals' ITC Counsel using information it learned from the evidentiary hearing and post-hearing briefing in the 1365 Investigation in violation of the Prosecution Bar Stipulation.

46. Similar to Mr. Johnson's unprompted amendments made during the prosecution of the '375 Patent, on January 14, 2025, Mr. Johnson filed an amendment in the '127 Application prior to any office action or communication from the Examiner. Mr. Johnson's amendment was filed at 6:26 PM, several hours after the ITC issued its notice of Final Determination finding No Violation of Section 337. Mr. Johnson's amendment was guided by the Commission's Opinion, but the opinion was confidential until the public version issued on February 4, 2025. Mr. Johnson's amendment in the '127 Application was guided by Shoals' ITC Counsel, either directly or indirectly through Shoals' in-

house counsel, as evidenced by the contemporaneous filing with the Commission issuing its confidential opinion in the 1365 Investigation.

Counter Claim I:

**Declaratory Judgment of Unenforceability of All Claims of
U.S. Patent No. 12,015,375 Due to Unclean Hands**

47. Voltage incorporates by reference the allegations contained in the preceding as set forth above.

48. Each Asserted Claim of U.S. Patent No. 12,015,375 (" '375 Patent") is unenforceable due to Shoals' unclean hands in its prosecution of the Asserted Patents.

49. The misconduct by Shoals and Shoals' ITC Counsel in prosecuting the Asserted Patents has immediate and necessary relation to the remedy Shoals now seeks in the instant action. Shoals has admitted that it prosecuted the '375 patent specifically to enforce against Voltage after it failed to prove a Section 337 violation in the 1365 Investigation. Shoals' request for relief in the instant action should be barred due to unclean hands.

Counter Claim II:
Declaratory Judgment of Unenforceability of All Claims of
U.S. Patent No. 12,015,376 Due to Unclean Hands

50. Voltage incorporates by reference the factual allegations set forth above.

51. Each Asserted Claim of U.S. Patent No. 12,015,376 (" '376 Patent") is also unenforceable due to Shoals' unclean hands in its prosecution of the Asserted Patents.

52. The misconduct by Shoals and Shoals' ITC Counsel in prosecuting the Asserted Patents has immediate and necessary relation to the remedy Shoals now seeks in the instant action. Shoals has admitted that it prosecuted the '376 patent specifically to enforce against Voltage after it failed to prove a Section 337 violation in the 1365 Investigation. Shoals' request for relief in the instant action should be barred due to unclean hands.

Counter Claim III:
Declaratory Judgment of Unenforceability of All Claims of
U.S. Patent No. 12,015,375 Due to Inequitable Conduct

53. Voltage incorporates by reference the factual allegations set forth above, ¶¶ 2-42, regarding the unenforceability of the '375 and '376 Patents due to unclean hands.

54. Each claim of U.S. Patent No. 12,015,375 (" '375 Patent") is also unenforceable due to Shoals' inequitable conduct during the prosecution of the Asserted Patents.

55. Both Asserted Patents share a common patent specification and are continuations from the original patent application 10/849,458 (" '458 Application") which issued on April 17, 2021, as U.S. Patent No. 10,992,254 (" '254 Patent"). Days before the '254 Patent issued, Eric Maschoff of the law firm Maschoff Brennan, filed continuation application 17/301,609 (" '609 Application") which later issued as U.S. Patent No. 11,689,153 (" '153 Patent"). (The '254 and '153 Patents together herein referred to as the "Related Patents".) Shoals asserted the '254 and '153 Patents against Voltage in the 1365 Investigation and in Case No. 1:23-cv-365 in this court.

56. On May 4, 2023, Shoals, with Maschoff Brennan and Mr. Maschoff as counsel of record, filed a complaint alleging that Voltage's LYNX Trunk Bus ("LYNX") infringed claims of the '254 Patent. *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365 (U.S.I.T.C.) ("the 1365 Investigation"). The '153 Patent

issued on June 21, 2023, and Shoals thereafter amended its complaint alleging that Voltage's LYNX also infringed claims of the '153 Patent.

57. On June 26, 2023, while acting as counsel of record for Shoals in the 1365 Investigation, Mr. Maschoff filed continuation application 18/341,655 ("'655 Application"), which later issued as the '375 Patent. On September 21, 2023, Shoals and Voltage filed a Prosecution Bar Stipulation in the 1365 Investigation wherein Shoals agreed that Maschoff Brennan, Shoals' counsel of record in the 1365 Investigation ("ITC Counsel"), would "institute an ethical wall prohibiting the involvement of all attorneys who have access to Voltage's confidential information disclosed in [the 1365 Investigation] from the prosecution of the continuation application, 18/341,655, and any subsequent related applications." *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, EDIS Doc. ID 804593 ¶ 4 (Sept. 21, 2023).

58. Maschoff Brennan either failed to enact an ethical wall as required by the Prosecution Bar Stipulation or enacted such a wall and transferred responsibilities for

the prosecution of the Asserted Patents to another Maschoff Brennan partner, Paul Johnson ("New Prosecution Counsel"), who had not subscribed to the protective order in the 1365 Investigation.

59. Mr. Johnson, the patent attorney who took over prosecution of the application that issued into the 375 Patent, and filed and prosecuted the application that issued into the '376 Patent, failed to disclose material information from the 1365 Investigation to the patentability of the claims that issued in the Asserted Patents.

60. Specifically, Mr. Johnson failed to disclose at least (i) the existence of the 1365 Investigation where the Related Patents were being asserted contemporaneously with the prosecution of the Asserted Patents by the same law firm, Maschoff Brennan; (ii) positions taken by Shoals in the 1365 Investigation regarding the disclosures in the common specification between the Related Patents and the Asserted Patents, including the construction of similar claim limitations; (iii) the *Markman* transcript and *Markman* order considering, discussing, and construing claim

language substantively similar and material to claim language in proposed amendments contemporaneously being discussed between Mr. Johnson and the Examiner; and (iv) Shoals' termination of the '254 Patent from the 1365 Investigation after the *Markman* Order (collectively, the "Withheld 1365 Information").

61. The Withheld 1365 Information would have been important and but-for material to a reasonable examiner in determining the patentability of the claims that issued in the Asserted Patents.

62. For example, on February 28, 2024, the Examiner e-mailed Mr. Johnson at 10:19 AM with proposals for amendments to the claims in the '464 and '655 Applications that the Examiner indicated would bring the cases into conditions for allowance. The Examiner noted that "Figures 8 and 54 best represent the limitation [the Examiner] is attempting to capture."

63. The Examiner's e-mail and Figures 8 and 54 are reproduced below:

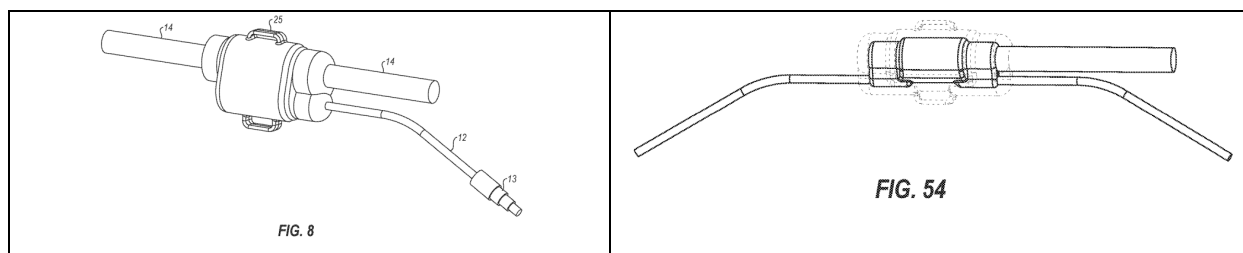
From: Cannon, Ryan <Ryan.Cannon@USPTO.GOV>
Sent: Wednesday, February 28, 2024 10:19 AM
To: Paul Johnson <PJohnson@mabr.com>
Subject: Proposed amendments for 18/523,464 and 18/341,655

CAUTION: External Sender

Mr. Johnson,

Please see the attached pdf for my proposals for examiner's amendment to bring the case into condition for allowance. Instant Figures 8 and 54 best represent the limitations I am attempting to capture. I will take suggestions of alternative language that represents those characteristics. This email exchange and the proposed amendments will be placed into the record of each application. Please let me know by the end of this week if you will need more time to get approval or refusal by your client.

Ryan Smith Cannon, Ph. D.
Primary Examiner, AU 1726
(571) 270-7186



64. The Examiner proposed amendments to each independent claim requiring that the drop line and feeder cable, or their pathways, extend parallel to one another away from the nexus or region of electrical connection (annotated with green highlight below), and for claims

having a first and second drop line, that the drop lines, or their pathways, extend in opposite directions, as shown below (annotated with yellow highlight below):

<p>18/341,655 proposed amendments</p> <p>Claim 1:</p> <p>After the last line, add –wherein the one or more drop line pathways and the feeder pathway extend parallel to one another away from the nexus, and the monolithic mold tapers to distinct apertures through which the one or more drop lines and the feeder cable exit the monolithic mold--.</p> <p>Claim 17:</p> <p>After the last line, add –wherein the first drop line pathway and the second drop line pathway extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder pathway--.</p> <p>Claim 22:</p> <p>After the last line, add –wherein the first drop line pathway and the second drop line pathway extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder pathway--.</p>
<p>18/523,464 proposed amendments</p> <p>Claim 1:</p> <p>In line 12, change “disposed about a region” to –disposed about and conforming to a region--.</p> <p>After the last line, add –wherein, in the one or more mold structures, the first drop line and the second drop line extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder cable--.</p> <p>Claim 22:</p> <p>In line 9, change “disposed about a region” to –disposed about and conforming to a region--.</p> <p>After the last line, add –wherein the drop line and the feeder cable extend parallel to one another away from the region of electrical interconnection, and the mold structure tapers to distinct apertures through which the drop line and the feeder cable exit the mold structure--.</p>

65. The same day and less than nine hours later, Mr. Johnson responded to the Examiner’s e-mail at 6:37 PM with counterproposals to the Examiner’s proposed amendments. Mr. Johnson’s e-mail did not provide any explanation for his further amendments. According to an Examiner-Initiated

Interview Summary dated February 29, 2024, a telephone conference between Mr. Johnson and the Examiner took place on February 28, 2024, and the Examiner accepted Mr. Johnson's alternative amendments:

From: Paul Johnson To: Cannon, Ryan Subject: RE: Proposed amendments for 18/523,464 and 18/341,655 Date: Wednesday, February 28, 2024 6:37:48 PM Attachments: 18341655 (S4079.10001US04) Proposed Examiner's Amendment.docx 18523464 (S4079.10001US05) Proposed Examiner's Amendment.docx										
<div style="border: 1px dashed black; padding: 5px; text-align: center;"> CAUTION: This email has originated from a source outside of USPTO. PLEASE CONSIDER THE SOURCE before responding, clicking on links, or opening attachments. </div>										
<p>Examiner Cannon,</p> <p>Thanks for the proposals. See attached for my counterproposals. I incorporated all of your changes in underline and then turned on track changes to track my changes. Happy to get on a call to discuss.</p> <p>Paul G. Johnson Maschoff Brennan 435-252-1367</p>										
<table border="1" style="width: 100%;"> <tr> <td rowspan="2" style="text-align: center; vertical-align: middle;"><i>Examiner-Initiated Interview Summary</i></td> <td>Application No. 18/523,464</td> <td colspan="3">Applicant(s) SOLON, Dean</td> </tr> <tr> <td>Examiner Ryan S Cannon</td> <td>Art Unit 1726</td> <td>AIA (First Inventor to File) Status Yes</td> <td>Page 1 of 1</td> </tr> </table>		<i>Examiner-Initiated Interview Summary</i>	Application No. 18/523,464	Applicant(s) SOLON, Dean			Examiner Ryan S Cannon	Art Unit 1726	AIA (First Inventor to File) Status Yes	Page 1 of 1
<i>Examiner-Initiated Interview Summary</i>	Application No. 18/523,464		Applicant(s) SOLON, Dean							
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<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">All Participants (applicant, applicants representative, PTO personnel)</th> <th style="text-align: left;">Title</th> <th style="text-align: left;">Type</th> </tr> </thead> <tbody> <tr> <td>Ryan S Cannon</td> <td>Primary Examiner</td> <td>Telephonic</td> </tr> <tr> <td>Paul Johnson</td> <td>Attorney</td> <td></td> </tr> </tbody> </table>		All Participants (applicant, applicants representative, PTO personnel)	Title	Type	Ryan S Cannon	Primary Examiner	Telephonic	Paul Johnson	Attorney	
All Participants (applicant, applicants representative, PTO personnel)	Title	Type								
Ryan S Cannon	Primary Examiner	Telephonic								
Paul Johnson	Attorney									
<p>Date of Interview: <u>28 February 2024</u></p> <p>Issues Discussed:</p> <p>Proposed Amendment(s)</p> <p>Examiner Smith proposed amendments (attached as an appendix) to bring the case into condition for allowance. Mr. Johnson proposed alternative amendments, which are incorporated into the instant office action.</p> <p><input checked="" type="checkbox"/> Attachment</p>										

66. The Examiner-Initiated Interview Summary makes no reference to any discussion of Withheld 1365 Information,

including that the 1365 *Markman* Order had issued in the 1365 Investigation just nine days earlier. Mr. Johnson understood that the Examiner's proposed amendments requiring that the drop line(s) and feeder cable, or their pathways, extend parallel to one another, posed challenges for Shoals similar to those that Shoals encountered with its assertion of the '254 Patent in the 1365 Investigation.

67. Shoals moved to terminate the 1365 Investigation with respect to '254 Patent on February 26, 2024 after the 1365 *Markman* Order construed the claim phrase "second aperture ... parallel to said first aperture", rejecting Shoals' argument that "for purposes of determining the 'parallel' requirement, it is sufficient for any portion of the 'second aperture' to be parallel to the 'first aperture.'" See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 16, EDIS Doc. ID 814555 at 42-47 (Feb. 20, 2024). The 1365 *Markman* Order construed the phrase "according to its plain and ordinary meaning, which requires the second aperture, considered as a whole, to be parallel to the first aperture, considered as a whole," nothing that "the claim

language for not state that 'any portion' of the second aperture is parallel to the first aperture." *Id.* at 44-45. Mr. Johnson was aware of the 1365 *Markman* Order's reasoning and proposed adding "at least a portion of" to the Examiner's proposed amendments for proposed independent claims 17 and 22 in the 655 Application, as shown below (highlighted in green):

wherein at least a portion of the first drop line pathway is parallel to at least a portion of the feeder pathway; and

wherein at least a portion of the first drop line pathway and at least a portion of the second drop line pathway extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder pathway.

wherein at least a portion of the drop line cable pathway is parallel to at least a portion of the feeder pathway; and

wherein at least a portion of the first drop line pathway and at least a portion of the second drop line pathway extend in opposite directions along a longitudinal axis that is parallel to a longitudinal axis of the feeder pathway.

68. Mr. Johnson was aware of the 1365 *Markman* Order and that Shoals had terminated the '254 Patent from the 1365 Investigation, but intentionally withheld this information from the Examiner when Mr. Johnson filed supplemental amendments to add new claims on February 22, 2024 in the '655 Application and in Mr. Johnson's communications with the Examiner on February 28, 2024.

69. Mr. Johnson had been aware of the 1365 Investigation and Shoals' assertion of Related Patents in the 1365 Investigation since at least as early as September 20, 2023. It was in consultation with, and based upon the arguments, positions, and holdings in the 1365 Investigation, including the Withheld 1365 Information, that Mr. Johnson proposed amendments to the applications that eventually issued as the Asserted Patents.

70. Despite this knowledge and use thereof, Mr. Johnson deliberately chose not to disclose the existence of the 1365 Investigation, the 1365 *Markman* Order, or Shoals' termination of the '254 Patent from the 1365 Investigation. Shoals deliberately chose not to disclose the Withheld 1365 Information to the USPTO with the specific intent to deceive the Examiner into granting the Asserted Patents as quickly as possible. Mr. Johnson's knowing and intentional use of directly relevant and material information from the 1365 Investigation (both public, and confidential, as described above) to prosecute the applications that issued as the Asserted Patents, including to prepare proposed amendments that eventually issued as claims of the Asserted

Patents, and simultaneous knowing and intentional withholding of the same and additional information known to Mr. Johnson from the 1365 Investigation (including the existence of the 1365 Investigation itself) from the Patent Office was a deliberately planned and carefully executed scheme to defraud the Patent Office and courts.

71. The deliberate nature of Mr. Johnson's conduct is evidenced by Shoals' decision to file the '464 Application before an office action even issued in the '655 Application, and to request Track I prioritized examination. Had Mr. Johnson disclosed the existence of the 1365 Investigation and the *Markman* Order, a reasonable examiner would have considered the *Markman* Order and other relevant pleadings or statements made by Shoals in the 1365 Investigation in deciding the patentability of the proposed claims. Mr. Johnson knew that the Examiner's consideration of information from the 1365 Investigation, which was *per se* material and should have been disclosed as a matter of course, pursuant to a duty to disclose such information to the PTO under 37 CFR § 1.56(a) and MPEP § 2001.06(c). Mr. Johnson deliberately withheld this material information

knowing that its disclosure would have slowed down prosecution of the Asserted Patents and caused the Examiner not to issue one or more claims of the Asserted Patents.

72. In particular, as referenced above, the 1365 *Markman* Order considered, discussed, and construed similar claim limitations to those being proposed during the prosecution of the Asserted Patents, and included an express rejection of Shoals' position regarding a requirement that only portions of certain claimed geometric features need be parallel. In reaching its conclusion, the 1365 *Markman* Order considered Voltage's argument that a construction requiring "any portion" of the claimed geometric features need be parallel would render the claim indefinite, and instead adopted a construction requiring that the geometric features be viewed as a whole when determining whether they were parallel as required by the claim.

73. At least the 1365 *Markman* Order and transcript from the *Markman* hearing from the 1365 Investigation each constituted material information required for disclosure under 37 CFR § 1.56(a) and MPEP § 2001.06(c), and but for

their omission, the Asserted Patents would not have issued. Were the 1365 *Markman* Order and *Markman* transcript before the Patent Office, the Examiner would have seen that it was Shoals' position that "for purposes of determining the 'parallel' requirement, it is sufficient for any portion of the 'second aperture' to be parallel to the "first aperture" because "the parallelism requirement can be met as long as it's parallel at any point of the second aperture's pathway." See *In re Certain Photovoltaic Connectors and Components Thereof*, Inv. No. 337-TA-1365, Order No. 16, EDIS Doc. ID 814555 at 42-43 (Feb. 20, 2024). The Examiner would have also seen that Shoals rejected Voltage's proposed construction identifying specific portions of the claimed geometric features that would be required to be parallel. *Id.* at 43. The Examiner would have seen that Shoals provided no rebuttal to Voltage's criticism that requiring only "only portions" of the claimed geometric features to be parallel would render the claim indefinite. *Id.* at 43-44.

74. At least independent Claims 1, 15, and 20 (and all claims depending therefrom), and dependent Claim 23 of the

'375 patent and dependent Claims 6 and 16 of the '376 patent, each contain claim language requiring a portion of a geometric feature be parallel with a portion of another geometric feature. All claims of the Asserted Patents were amended by the Examiner to include a parallel requirement. The Examiner having information reflecting Complainant's position of the scope and meaning of language claiming that mere portions of geometric features be parallel would have prevented the issuance of at least independent Claims 1, 15, and 20 (and all claims depending therefrom), and dependent Claim 23 of the '375 patent and dependent Claims 6 and 16 of the '376 patent, as resulting in indefinite or otherwise meaningless claim limitations. The Examiner having Shoals' litigation position that the "parallel" requirement could be met by "any portion" would have prevented the issuance of any claim of the Asserted Patents. Accordingly, but for the omission of at least the *Markman* transcript and 1365 *Markman* Order, the Asserted Patents would not have issued.

75. Shoals failed to disclose the existence of the 1365 Investigation and *Markman* Order to the PTO with the

intent to deceive, where the single most reasonable inference can be drawn is that Mr. Johnson and Shoals were motivated to quickly obtain new claims to assert against Voltage in view of its failures to demonstrate a Section 337 violation in the 1365 Investigation. Mr. Johnson's intent is further evidenced by Shoals' issuing a press release less than two weeks after the Examiner-Initiated Interview between Mr. Johnson and the Examiner on February 28, 2024. In that press release, Shoals vowed to appeal the Administrative Law Judge's termination of another patent from the 1365 Investigation and touted its Notices of Allowances for the Related Patents.²

76. Mr. Johnson's deliberate withholding of material information from the 1365 Investigation while prosecuting the '375 patent, with the intent to deceive the Patent Office into allowing additional patents for Shoals to quickly assert against Voltage in a second action in this

² Shoals Technologies Group - Shoals Technologies Group Asserts Its Intellectual Property Rights and Vows to Defend Patent, *available at* <https://investors.shoals.com/news/news-details/2024/Shoals-Technologies-Group-Asserts-Its-Intellectual-Property-Rights-and-Vows-to-Defend-Patent/default.aspx> (last visited March 4, 2025).

court and a second investigation before the International Trade Commission renders the '375 patent unenforceable.

Counter Claim IV:

**Declaratory Judgment of Unenforceability of All Claims
of U.S. Patent No. 12,015,376 Due to Inequitable Conduct**

77. Voltage incorporates by reference the factual allegations set forth above regarding the unenforceability of the '375 and '376 patents due to unclean hands.

78. Voltage incorporates by reference the factual allegations set forth above regarding the unenforceability of the '375 patent due to inequitable conduct.

79. Each claim of U.S. Patent No. 12,015,376 ("'376 Patent") is also unenforceable due to Shoals' inequitable conduct during the prosecution of the Asserted Patents.

80. Mr. Johnson's deliberate withholding of material information from the 1365 Investigation while prosecuting the '376 patent on behalf of Shoals, was with the intent to deceive the Patent Office into allowing additional patents for Shoals to quickly assert against Voltage in a second action in this court and a second investigation before the International Trade Commission.

81. But for the withholding of such material information from the Patent Office, the '376 patent would not have issued. Accordingly, Shoals' inequitable conduct renders the '376 patent unenforceable.

IV. PRAYER FOR RELIEF

WHEREFORE, having fully replied to Plaintiffs' Complaint, and asserting affirmative defenses and Counterclaims, Defendants pray the Court for the following relief:

1. Shoals' Complaint and all claims thereunder be dismissed, with prejudice, and that Plaintiffs have and recover nothing from Defendants;

2. That the Court deny the relief sought by Shoals in its Complaint;

3. That the Court enter a declaration that the Asserted Patents are invalid and unenforceable against Defendants based on Shoals' unclean hands and inequitable conduct.

4. That the Court award Defendants its reasonable fees and costs to the fullest extent allowed by law;

5. That the Court tax the costs of this action
against Shoals;

6. That all issues of fact be tried by a jury; and

7. For all other relief, both legal and equitable,
which the Court deems just and proper.

Dated: March 10, 2025

By: /s/ Robert C. Van Arnam

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CERTIFICATE OF SERVICE

I certify that on this day, the foregoing document was filed electronically by using the Middle District of North Carolina CM/ECF system. Notice of this filing will be sent to all parties and counsel of record by operation of the Court's electronic filing system. The foregoing was also served on counsel for Plaintiff via electronic mail, pursuant to an agreement between the Parties.

Dated: March 10, 2025

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